

TECHNOLOGY GOALS FOR GENERATION IV NUCLEAR ENERGY SYSTEMS

- 9 PAGE SUPPORTING DOCUMENT
AVAILABLE ON WEB
- 8 SUCCINCT GOALS
- REVIEWED BY NERAC, GIF, DOE,
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SUSTAINABILITY

- WORLDWIDE AGREEMENT TO PRODUCE ENERGY IN ACCORDANCE WITH SUSTAINABLE DEVELOPMENT.
- SUSTAINABILITY – BALANCE BETWEEN ECONOMY, ENVIRONMENT, AND SOCIAL RESPONSIBILITY.

Sustainability-1. Generation IV nuclear energy systems including fuel cycles will provide sustainable energy generation that meets clean air objectives and promotes long-term availability of systems and effective fuel utilization for worldwide energy production.

Sustainability-2. Generation IV nuclear energy systems will minimize and manage their nuclear waste and notably reduce the long term stewardship burden in the future, thereby improving protection for the public health and the environment.

Sustainability-3. Generation IV nuclear energy systems including fuel cycles will increase the assurance that they are a very unattractive and least desirable route for diversion or theft of weapons-usable materials.

SAFETY AND RELIABILITY

Safety and Reliability-1. Generation IV nuclear energy systems operations will excel in safety and reliability.

Safety and Reliability-2. Generation IV nuclear energy systems will have a very low likelihood and degree of reactor core damage.

Safety and Reliability-3. Generation IV nuclear energy systems will eliminate the need for offsite emergency response.

ECONOMICS

Economics-1. Generation IV nuclear energy systems will have a clear life-cycle cost advantage over other energy sources.

Economics-2. Generation IV nuclear energy systems will have a level of financial risk comparable to other energy projects.